Patrice Doré Environment Canada Waste Reduction and Management Division

Electronics Waste and Spent Lead Acid Batteries Capacity Building Workshop 4-6 December 2007: Tijuana, Mexico

Title of presentation: Regulatory Framework for Spent Lead-Acid Batteries (SLABs) and SLAB Recycling in Canada

The goal of this presentation is to provide you with an overview of Canada's obligation and regulations about the international movements of hazardous waste and hazardous recyclable materials, which include spent lead-acid batteries. I will provide you background information, on Canada's international obligations, the federal and provincial authorities in Canada, the export and import of hazardous waste and hazardous recyclable materials regulations in Canada; and I'll talk about the spent lead-acid battery framework, regulatory framework, the Canadian imports and exports of SLABs for a period of five years' time lag. I have some statistics and I'll speak about the notification process in Canada and also the required documentation for trans-boundary movements of hazardous waste and hazardous recyclable material, including SLABs, and finally I'll talk about the movement document that must accompany the permit when you do a transboundary movement. This presentation is designed for people who have little to no experience with our program or the export and import of hazardous waste and hazardous recyclable materials regulations.

Hazardous wastes were originally defined as basically any waste products, substances or organisms that are potentially hazardous to human health or the environment, destined for disposal or recycling operations. In this definition, keep in mind that waste also includes recyclable materials. We now have specific definitions for hazardous waste and hazardous recyclable materials, disposal and recycling operations in our regulations. Examples of generators of hazardous waste or hazardous recyclable materials are like companies like the chemical industries, the manufacturing industry and the methyl recovery industry. A special regime for these wastes or materials is required in order to eliminate or reduce the hazard through special disposal of treatment facilities or technologies, thereby preventing any impact on the environment or to human health. It is also required in order to maximize the recovery of resources for productive use in Canada and abroad and properly dispose of residues through special disposal or recycling techniques.

Canada is party to three international agreements with respect to the trans-boundary movements of hazardous waste and hazardous recyclable materials. Under the export and import of hazardous waste regulations, Canada is permitted to export to or import from any country that is a party to at least one of the following three agreements. The first one is the Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and Their Disposal. The other one is the Organization for Economic Cooperation and Development Decisions or the

OECD decisions for short, and finally the Canada-U.S.A. Agreement on the Trans-boundary Movement of Hazardous Waste. I'll go in more detail for each one.

The Basel Convention was adopted at a conference held in Basel, Switzerland. It was adopted under the United Nations Environment program in 1989 and came into force in 1992. To date, there are 170 parties to the Convention, including 167 that have ratified it, including Canada which signed the Convention in 1989 and began implementing its terms in 1992. The goals of the Basel Convention are to minimize the generation of hazardous waste, it's to improve the controls on exports and imports of hazardous waste and hazardous recyclable materials, including requiring liability and compensation for accidents. The other goal is to prohibit shipments to countries unable to manage and dispose of them in an environmentally sound manner. The Basel Convention lists all ways to be controlled by parties to the Convention under Annex 8, including SLABs under the entry A11-60. Although Canada is party to the Convention, it does not employ the Annex 8 listing of the Basel Convention for defining hazardous waste or hazardous recyclable material. This is done through domestic legislation that I will discuss shortly. Article 11 of the Basel Convention allows for parties to the Convention to develop bilateral or multilateral agreements for the movements of hazardous waste provided that the agreements contain provisions that are no less strict than the Convention itself.

The OECD decisions – that's the second international agreement that we have to go by. Canada, the US and Mexico are members to the OECD. To date there are 30 member countries. There are two OECD decisions. The first one is the 1994 amended OECD decision, C94-150 to final, that's how they call it. It's for the trans-frontier movements of hazardous waste. It identifies the core list of hazardous waste and it develops the international waste identification code or the IWIC code for short, which serves to define and classify the hazardous waste to be controlled when subjected to trans-frontier movements. This IWIC is required when notifying [inaudible] of trans-boundary movements of hazardous waste and hazardous recyclable materials. This was needed to ensure that codes were harmonized with the Basel Convention.

The other OECD decision is the 2001 OECD decision, C2001-107 Final on the trans-boundary movements of waste destined for recovery operations; it was recently amended in 2004 to update the decision and harmonize its waste list with the new Basel Annexes 8 and 9. It provides a simplified two-tiered system to control the trans-boundary movements of hazardous recyclable material, green and amber, within the OECD area. This system takes into consideration the fact that movements between OECD member countries are sufficiently controlled to allow modified controls while managing the risk posed by the hazardous recyclable materials. Specifically, we exempt four waste streams for the export and import of hazardous waste regulations provided that they meet the criteria set out and the definitions of hazardous recyclable materials. It takes into consideration that OECD member countries have well established lines of communication and pre-approved facilities allow for the more efficient flow of hazardous recyclable materials between the developed countries enhancing resource recovery. This risk-based control system considers the hazardous nature of the hazardous recyclable material and their economic value and also considers the management and its associated risk involved in trans-boundary movements of hazardous recyclable materials. The original OECD decision and its ensuing iterations are recognized as meeting the Article 11 conditions of the Basel Convention.

The Canada-USA Agreement is a bilateral agreement between Canada and the U.S., and like the OECD decision, it is also recognized as meeting Article 11 of the Basel Convention. It came into effect in 1986 and was later amended in 1992. It controls the trans-boundary movements of hazardous waste and prescribed non-hazardous waste by setting out specific administrative conditions for such movements between Canada and the U.S. Presently, the U.S. has signed but not ratified the Convention; however, as the U.S. is Canada's most important economic trading partner, management of hazardous waste needed to be addressed. This agreement meets these requirements. Also one of the important goals of the international agreement is to perform disposal operations as close to the source as possible. Canada and the U.S. being such big countries, the best technology could be just across the border sometimes. Note that the Canada-USA Agreement does not control movements of hazardous recyclable materials for recycling. Such movements between Canada and the U.S. are controlled under the OECD, which both Canada and the U.S. are parties to. This agreement, in a sense, rationalizes the use of authorized disposal and recycling facilities on both sides of the border. Under the agreement, hazardous wastes are defined according to the national regulations of each country. For example, in Canada spent lead-acid batteries are subject to the regulatory conditions of the export and import of hazardous waste regulations for trans-boundary movements destined for either disposal or for recycling.

Now the federal and provincial authorities in Canada. Control of hazardous waste and hazardous recyclable materials within Canada is a shared responsibility between the federal and provincial authorities. Each jurisdiction contributes to environmental and human health protection. Shipments of hazardous waste and hazardous recyclable material may be subject to other local, provincial, national or international law in addition to the export and import of hazardous waste regulations. The federal government is responsible for hazardous waste and hazardous recyclable materials crossing an international boundary or for movements between provinces in Canada. This is for waste destined for disposal or recycling. The provincial governments have jurisdiction over the transportation of hazardous waste within its boundaries, as well as licensing and permitting of authorized facilities undertaking disposal or recycling operations and also authorizing carriers. They are also responsible for establishing the controls for licensing hazardous waste generators, carriers and treatment facilities within their boundaries. Authorized facilities are regulated by the provincial authorities and can only recycle or dispose of hazardous waste for which they have been issued a certificate of approval or meet their operating permits. The provincial governments also play an important role by reviewing notices of import and consenting or objecting and imposing conditions, if necessary for the import of hazardous waste or hazardous recyclable material into their jurisdiction. And finally the municipal governments are responsible to establish authorized collection services and programs within their municipalities, such as the services for the collection of household hazardous waste at their environmental depots.

Now the export and import of hazardous waste and hazardous recyclable material regulations in Canada. The new revised regulations came into force on November 1, 2005 and they are called the Export and Import of Hazardous Waste Regulations. It's a long acronym, it's a long regulation to say every time, but try to refer to it as the Export and Import Regs or EIHW for short. They were written to be compatible and consistent with the Basel Convention and the OECD decisions and work in conjunction with the transport of dangerous goods regulations.

The definition of hazardous waste was decoupled into specific definitions for hazardous waste and hazardous recyclable materials. They were split in two. Spent lead-acid batteries were controlled under the old regulations since 1992 and continue to be controlled under the revised regulations. The main purpose of the export and import regulations is to set out the conditions for export and import of hazardous waste and hazardous recyclable materials shipped across the Canadian border, including transits through Canada. These regulations also ensure that Canadian hazardous waste or hazardous recyclable materials, exports or imports, have been consented to by the receiving country or province before shipment. The export and import of hazardous waste regulations set out all the conditions that must be met before any international shipment of hazardous waste can proceed. The goals of the export and import of hazardous waste regulations include prior informed consent. This includes the notification that the consent and [inaudible] processes. The other goal is the confirmation of disposal and recycling within 30 days after disposal or recycling is completed. Also ensure that liability insurance is required for all transboundary movements due to the cost associated with the potential release and cleanup of the environment. There is also the export reduction plans. It places responsibility on Canadian generators of waste, and finally the environmentally sound management of waste.

Now that I have covered the international obligations and the Canadian regulations on the export and import of hazardous waste and hazardous recyclable materials, I would like to talk more specifically about spent lead-acid batteries and their regulatory framework. In order to be controlled, spent lead-acid batteries must be destined for disposal or for recycling according to Schedule 1 or 2 of our regulations. They also must meet the hazardous waste or hazardous recyclable material definitions under section 1 or 2 of the regulations. Spent lead-acid batteries meet the definition because they are, for the most part, captured under the transport of dangerous goods regulations, which is one of the criteria in the definition. For example, a majority of industrial spent lead-acid batteries are classified as hazard class 8, United Nations product identification number or the U.N. PIN number 2794, and that's for batteries, wet, filled with acid, electrical storage.

Here's a chart (on slide) that shows the amount of imports and exports of spent lead-acid batteries for Canada between 2001 and 2005. It is a very consistent, non-volatile market. We import 3-4 times more than we export. Therefore, we think that Canada's management of spent lead-acid batteries is very efficient and we have good infrastructures to perform recycling of spent lead-acid batteries.

Here (on slide) I just wanted to give you an idea of where the exports of SLABs go and where the imports of SLABs come from. SLABs is short for spent lead-acid batteries. As you can see, all the exports go to the U.S., and the main exporters to the U.S. are from British Columbia, Ontario and Quebec. This is not shown on the slide, but those are the main exporters. Also, all imports come from the United States and France and the main importers are located in Ontario and in Quebec. All exports of SLABs to the United States were destined for recycling, namely for metal recovery or for entering storage prior to metal recovery. Less than .2% of imports of SLABs in Canada were destined for disposal with over 99% destined for metal recovery, and more than 91% of SLABs originate from transport, automobile dealers and repair facilities.

Now I'll talk about the notification process in Canada and how it works. The Canadian notifier -- ie, the exporter, importer or the person conveying in transit -- must request notice reference number from Environment Canada for the purposes of submitting the notification information required in the regulations. The prescribed notification information is outlined in Section 8 of the regulations. It includes the contact information, such as the name, the registration numbers, civic, mailing and electronic addresses and phone and fax numbers of the Canadian notifier, the foreign exporter or receiver as the case may be, all authorized carriers, all authorized facilities that will receive the hazardous waste or hazardous recyclable materials, including from which the hazardous waste or material will be shipped. The notice may be submitted by any head office; however, it must indicate the shipping and receiving sites. Note that the regulations are site specific, so for example if more than one site is shipping to Canada, you will need to send notice and obtain a permit for each site. Where an interim operation is to be performed on the waste stream following a trans-boundary movement, both the initial receiving facility and the final receiving facility where the final operation will be done, need to be identified in the notice. We also look for shipment details, information like the proposed dates of the first and last shipments. We need the ports of entry and exit, the customs office, if applicable. We also look for information on the hazardous waste and hazardous recyclable material itself, like we need the required codes, the international codes, the customs codes or the export and import hazardous waste regulations code, as applicable, and if it is an exportable hazardous waste, we need options reducing the export of hazardous waste and the reason why disposing outside of Canada. We also need insurance details like the name of each insurance company, and the policy number for each insurance policy is required. And in addition to the above information I just mentioned, the notifier must also submit copies of the signed written contractual agreements between the parties involved, excluding the financial information. So no international shipments of hazardous waste or hazardous recyclable materials can take place, including the SLABs, without first receiving a permit which is valid for a maximum of one year from the Minister of the Environment. The notification that I've just spoken about serves as an application for an export or import permit. There are no such things as renewals. At the end of the validity period of your permit you need to reapply for a new permit. We have a user guide on our website, like the Waste Reduction and Management division website on the implementation of the Export and Import of Hazardous Waste regulations. I'll provide you with a link at the end.

Now the required information for trans-boundary movements of hazardous waste and hazardous recyclable materials, including SLABs, are the following: In order to achieve the movement, two different documents are required. You need a permit and you need a movement document. The movement document is formally known as the manifest, for those of you who are familiar with that term. Permits are required prior to any movements of hazardous waste or hazardous recyclable material and a copy of it must accompany the hazardous waste in transport. These permits are issued by Environment Canada following notification as mentioned earlier. It is only when you have received this permit that you may proceed with your shipments, in accordance with the conditions stipulated in your permit and in the regulations. And it's only for the time period indicated on the permit. When in transport, hazardous waste or hazardous recyclable materials must also be accompanied by a movement document. The movement document provides a record of the various facilities and carriers involved in the shipment. It provides detailed information on the types and amounts of hazardous waste or hazardous recyclable materials being shipped and information on the operations performed once the waste or the

materials reach their final destination. A movement document template is included in Schedule 9 of the regulations. It meets the needs of both the federal and provincial government and takes into consideration the international codification requirements. The movement document has to be distributed to each party involved in any given shipment. I mean the exporters, the importers and the carriers as prescribed by the regulations. There are three different parts, like the yellow part and the green part are to identify the generator, like the exporter or the importer. The pink area is to identify the carrier and the white area is to identify the final destination or the receiving facility.

But my final comments... We have our e-mail address, telephone and by fax and we also have our website, which includes a lot of useful information. You can find information about all the international agreements that I've just spoken about, like the Basel Convention, OECD decisions and the Canada-U.S.A. agreement. There is also the text for the Canadian Environmental Protection Act and the text for our regulation itself is all there. And when I talk about a user guide, like I said there's a user guide to the implementation of the regulations but there's also a user guide to the classification of hazardous waste and hazardous recyclable material because the onus is on the importer or the exporter in Canada to clearly classify the hazardous waste or hazardous recyclable material. We also have the electronic administrative notice form that you can just download and fill out and that will serve as an application for a permit, and we also have the movement document instruction that tells you how to fill out that document.

So I'd like to thank you, and hopefully you can take with you some useful information, and I wish everyone a nice day and thank you for your attention.